

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A liquid-vapour distribution device for use in two-phase concurrent down-flow vessels, comprising:

a level, horizontal tray being perforated with holes, each perforation through the horizontal tray being fitted with a vapour lift tube,

wherein the vapour lift tube consists of at least one elongated up-flow leg and one down-flow leg creating one or two up-flow zones, a down-flow zone and a transition zone between the up and down-flow zones, the one or two up-flow legs of the vapour lift tube are fitted along the down-flow leg so that each up-flow leg is non-concentric with respect to the down-flow leg[[,]]; and

the improvement of which comprises a bluff body being a fairing or a guide vane arranged within the transition zone and/or in a region of the up-flow or down-flow zone adjacent to the transition zone of the vapour lift tube, wherein the fairing or the guide vane is provided on top of the legs, the fairing or the guide vane curving towards the legs of the vapour lift tube, to provide even liquid distribution below the tray.

2. (Canceled)

3. (Canceled)

4. (Currently amended) The liquid-vapour distribution device of claim [[3]] 1, wherein one or more fairings are arranged on the down-flow leg adjacent to the transition zone of the tube.

5. (Canceled)